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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/571,668	03/13/2006	Franz Auerbach	1454.1689	3470
21171	7590	05/05/2009	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			COMSTOCK, NATHAN	
			ART UNIT	PAPER NUMBER
			4132	
			MAIL DATE	DELIVERY MODE
			05/05/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/571,668

Applicant(s)

AUERBACH ET AL.

Examiner

NATHAN E. COMSTOCK

Art Unit

4132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2006 (Prelim. Amendment).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 18-37 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.
2. This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.
3. In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 18-33, drawn to an electrical device.

Group II, claim(s) 34-36, drawn to a method for producing an electrical device.

4. The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Groups I and II share the common and/or corresponding technical features of a substrate, an electrical component mounted on the substrate so as to define a surface contour between the electrical component and the substrate; and an insulating film provided on the substrate and on the electrical component to electrically insulate the electronic component, the insulating film having a border section, the insulating film having a surface contour following the surface contour formed between the electrical component and the substrate, wherein the border section of the insulating film has a dielectric strength to withstand an electrical field of at least 10 kV/mm.
5. However, in order to be considered a common special technical feature, any such feature must be novel and non-obvious. The above described technical features are not novel and non-obvious. PCT Pat. App. Pub. No. WO 03/030247 to Hase et al., of which examiner is using U.S. Pat. App. Pub. No. 2005/0032347 as a translation, discloses a substrate (copper layers 11 and 12

and ceramic layer 10, paragraph [0055] and FIG. 2A), an electrical component (semiconductor chips 2, paragraph [0057], and FIG. 2A) mounted on the substrate (FIG. 2A) so as to define a surface contour between the electrical component and the substrate (FIG. 2A); and an insulating film (electrically insulating plastic film 3, paragraph [0063], FIG. 2B) provided on the substrate (FIG. 2B) and on the electrical component (FIG. 2B) to electrically insulate the electronic component (paragraph [0064]), the insulating film having a border section (FIG. 2C), the insulating film having a surface contour following the surface contour formed between the electrical component and the substrate (FIG. 2C).

6. Hase does not explicitly disclose that the border section of the insulating film has a dielectric strength to withstand an electrical field of at least 10 kV/mm. However, Hase does disclose that polyimide insulating films are used for their high heat resistance (paragraph [0037], that high dielectric field strengths are possible using thick insulation layers (paragraph [0039]), and films that have homogenous insulation properties (paragraph [0041]), and that dielectric strengths in the kV region can be achieved by bonding multiple thin layers of insulation (paragraph [0066]).

7. Additionally, U.S. Pat. App. Pub. No. 2002/0001763 to Yasuno et al. discloses polyimide based insulating films having thicknesses near the lower range of thicknesses disclosed by Hase as typical and dielectric strengths to resist an electric field of at least 10 kV/mm (paragraphs [0130] and [0147]-[0149]).

8. It would not have constituted an inventive step at the time of the invention to use a polyimide based film of the composition of Yasuno in the electrical device of Hase. One of ordinary skill in the art at the time of the invention would have been motivated to do so in order

to improve the dielectric strength of the insulating layer in Hase (paragraph [0039] of Hase infers that high dielectric field strengths are beneficial). It would be expected that the utilized film composition of Yasuno having the thicknesses recommended by Hase would result in a border section that achieves the claimed dielectric strength resistance. Therefore all of the common technical features between groups I and II are either not novel or obvious.

9. Because all of the common technical features between groups I and II are disclosed within the prior art, such common technical features cannot be special technical features under PCT Rule 13.2. As a result, the claims corresponding to Groups I and II lack unity of invention.

10. A telephone call was made to Applicant's representative, Mark Henry, on April 14, 2009 to request an oral election to the above restriction requirement, but did not result in an election being made.

11. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

12. The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

13. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the

application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

14. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

15. In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

CONCLUSION

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATHAN E. COMSTOCK whose telephone number is (571) 270-1133. The examiner can normally be reached on Monday through Thursday, 8am-5pm Eastern Standard Time.

17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael LaVilla can be reached on (571) 272-1539. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/N.E.C./
Nathan E. Comstock
Patent Examiner, Art Unit 4132
29 April 2009

/Michael La Villa/
Michael La Villa
Supervisory Patent Examiner, Art Unit 4132
6 May 2009